

### **Abstract of the Disclosure**

Upon receipt of signals from a base station having a plurality of transmitting antennas, a mobile node  
5 measures the propagation loss, fading frequency or correlation coefficient of the signals transmitted from each antenna and notifies a base station of an antenna, the weight of which is controlled and which is used to communicate with the base station, as well as weight  
10 using an upward channel. The base station extracts the antenna selection data and control weight data transmitted from the mobile node and communicates with the mobile node while controlling the weight of the selected antenna and fixing the weight of any unselected  
15 antennas.